Application No. 10/519,529 Filed: June 6, 2005

Group Art Unit: 2877

IN THE CLAIMS:

Please cancel Claim 4, without prejudice.

Please amend Claims 1 - 3 and 5 as follows:

1. (PRESENTLY AMENDED) A Raman spectrometry apparatus containing a

source of excitation (14), optical means of excitation directing a beam of excitation (15) derived

from that source on the sample (17) containing an inlet diffusion slot (19), a spectral dispersion

system (20), means for selecting the Raman energy (23), a detector (22), optical detection means

directing the Raman energy thus collected and selected to the detector (22), characterized in that

the optical means (16) of excitation causes the beam of excitation (15) to be dispersed by the

dispersion system (20), said optical means (16) of excitation containing an inlet slot (24) and an

outlet slot of excitation constituted by the inlet diffusion slot (19) and selecting the wavelength

of excitation, characterized in that said means for selecting the Raman energy includes an

operatable micromirror reflective system.

2. (PRESENTLY AMENDED) A <u>The</u> Raman spectrometry apparatus according to

claim 1 wherein the inlet slot (19) of excitation lies roughly in or about the focal plane of the

dispersion system (20).

3. (PRESENTLY AMENDED) A <u>The</u> Raman spectrometry apparatus according to

claim 1, characterized in that the means of selection (23) of the Raman energy-include-comprises

a holographic filter which stops the wavelength of excitation.

4. (CANCELLED)

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5. (PRESENTLY AMENDED) A Raman spectrometry apparatus according to

claim 1, characterized in that means for sampling a portion of the beam of excitation is are

placed between an output outlet slot of excitation slit and the sample (17) and enables to control

of the wavelength of excitation at its maximum of energy by microrotation of the dispersion

system <del>(20)</del>.

Please add new Claims 6 - 10.

6. (NEW) A Raman spectrometry apparatus comprising a source of optical

excitation source producing optical excitation energy, an optical train for receiving said optical

excitation energy and directing said optical excitation energy on a sample through an inlet slit, a

spectral dispersion system, a Raman energy selection device, a detector positioned to receive

said selected Raman energy, optical detection means directing the Raman energy thus collected

and selected to the detector, said optical excitation source causing said optical excitation energy

to be dispersed by said spectral dispersion system, and said optical train comprising an output slit

and selecting the wavelength of excitation, said Raman energy selection device comprising an

operatable micromirror reflective system.

7. (NEW) The Raman spectrometry apparatus of claim 1 wherein the inlet slit of

excitation lies in a focal plane common to the spectral dispersion system.

8. (NEW) The Raman spectrometry apparatus of claim 1 wherein the spectral

dispersion system comprises a holographic filter for blocking the wavelength of excitation.

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9. (NEW) The Raman spectrometry apparatus of claim 1 further comprising a

sampler between the output slit and the sample, wherein the sampler samples a portion of the

optical excitation energy and controls the wavelength of excitation at its maximum of energy by

microrotation of the dispersion system.

10. (NEW) A spectrometry apparatus comprising:

an excitation source producing excitation energy;

an excitation director guiding said excitation from the excitation source onto a sample;

a collector receiving energy diffused by the sample:

a spectral dispersion system receiving energy diffused by said sample and collected by

said collector outputting spectrally dispersed diffused energy;

a micromirror reflective system for receiving the output of said spectral dispersion

system, and comprising micromirrors and a controller for orienting said micromirrors to select a

wavelength;

a detector for receiving the output of said micromirror reflective system.

11. (NEW) The Raman spectrometry apparatus according to claim 2, characterized in

that the means of selection of the Raman energy includes a holographic filter which stops the

wavelength of excitation.

12. (NEW) The Raman spectrometry apparatus according to claim 2, characterized in

that means for sampling a portion of the beam of excitation are placed between an outlet slot of

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excitation and the sample and enable to control the wavelength of excitation at its maximum of

energy by microrotation of the dispersion system.

13. (NEW) The Raman spectrometry apparatus according to claim 3, characterized in

that means for sampling a portion of the beam of excitation are placed between an outlet slot of

excitation and the sample and enable to control the wavelength of excitation at its maximum of

energy by microrotation of the dispersion system.

14. (NEW) A spectrometry apparatus as in claim 6, wherein said excitation source

producing excitation energy.

15. (NEW) A spectrometry apparatus as in claim 6, wherein said collector receiving

energy diffused by the sample comprises an inlet diffusion slit.

16. (NEW) A spectrometry apparatus as in claim 6, wherein said spectrally dispersed

diffused energy is in a Raman emission.

17. (NEW) A Raman spectrometry apparatus as in claim 6, wherein said optical

train comprises, in part, said spectral dispersion system.

18. (NEW) A Raman spectrometry apparatus as in claim 6, wherein said Raman

energy selection device comprises a filter.